SHARP®

21LS-90C

**COLOUR TELEVISION
OPERATION MANUAL**

**Instrukcja obsługi
telewizora kolorowego**

**SZÍNES TELEVÍZIÓKÉSZÜLÉK
KEZELÉSI ÚTMUTATÓ**

**Návod k použití
barevné televize**

**FAREBNÝ TELEVÍZNY PRIJÍMAČ
PREVÁDZKOVÁ PRÍRUČKA**

**Руководство по эксплуатации
цветного телевизора**

**Carte tehnică pentru
televizor în culori**

Please read this operation manual carefully before using the colour television.

Prosimy uważnie przeczytać ten podręcznik obsługi przed rozpoczęciem korzystania z telewizora.

Gondosan olvassa el a Használati útmutatót, mielőtt használná a színes televíziót.

Prosíme přečtěte si pozorně tento návod k použití před použitím barevné televize.

Pred použitím si pozorne prečítajte túto príručku.

Просьба внимательно ознакомиться с настоящим Руководством перед включением телевизора .

Consultati acest manual înainte de a utiliza televizorul color.

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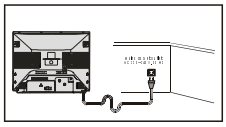
Safety Precautions

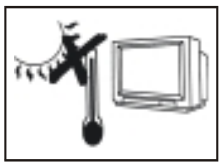
This equipment complies with the requirements of Directives 89/336/EEC, 92/31/EEC and 73/23/EEC as amended by 93/68/EEC.

This receiver should only be operated from a **220-240V AC, 50 Hz** outlet. Ensure you select the correct voltage setting for your convenience.



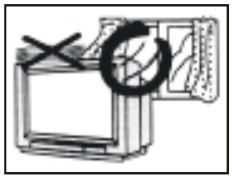
To prevent fire or electrical shock, do not use the TV set in an excessively damp place.

Position the TV set out of direct sunlight and away from heat, as high temperatures can damage the cabinet, CRT, or other electronic parts.



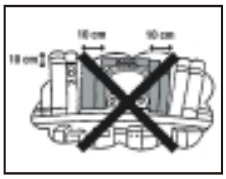
Do not cover ventilation slots with objects such as newspapers, tablecloths, curtains, etc.

Do not cover the ventilation holes at the back of the TV set, this can cause fire or other serious problems. Leave an adequate open space behind the TV set for good ventilation.



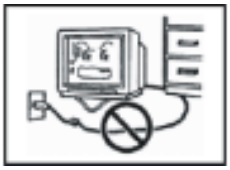
In order to ensure that the television is properly ventilated, leave a space of at least 10 cm around the set.

Do not install this equipment in a confined space such as a bookcase or a built-in cabinet.



Television equipment and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.

To prevent electrical shock, do not subject the AC power cord to damage by bending or twisting it, or by placing heavy items on top of it and do not place the AC power cord under the TV set. If the AC power cord becomes damaged, unplug it from the wall outlet immediately and call your dealer for service.



Do not place this television equipment on an unstable cart, stand, or table. The television equipment may fall, causing serious injury to a child or an adult, and serious damage to the equipment.

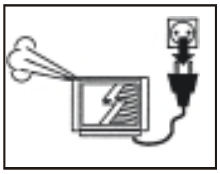
Use only with a cart or stand recommended by the manufacturer, or sold with the television equipment.

Never remove the back of the cabinet, as there is high voltage in the TV set.

Please call for service.

When replacement parts are required, be sure the service technician has used replacement parts which are specified by the manufacturer or have the same specifications as the original one. Unauthorized substitutions may result in fire, electrical shock, or other hazards.

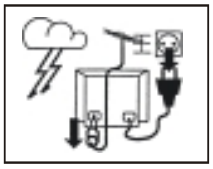
Unplug the power cord from the wall outlet immediately if the TV set begins to make unusual noises or give off smoke or an odd smell, then call your dealer for service.



Always disconnect your television from the mains and the aerial cables during thunderstorms.

Even if your television is switched off, it can still be damaged by lightning striking the mains and/or aerial cable.

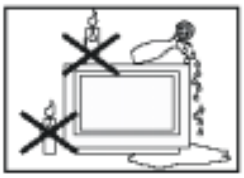
Do not leave your TV set in Stand-by or operating mode when you leave the house.



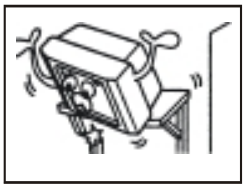
In order to prevent electrical shocks and fires, ensure that the television is not subjected to splashes or spills of water, and avoid inserting objects or pouring any type of liquid into the set.

To prevent fire, never place any type of candle or naked flames on the top or near the TV set.

If an object or liquid enters the set, disconnect the mains supply and contact technical service.



Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.



Do place the TV set onto an even stand, table or track which size is bigger than the TV set.

If the TV set is put onto a smaller size or uneven stand, table or track may cause the TV cabinet distort. Do not put or insert anything between TV set and the stand, table or track.

The tube of your TV has a special coating. Do not knock or rub on the tube face with sharp or hard surfaces, otherwise you will damage the coating.

To prevent damaging the surface of the television screen, remove finger prints only with a soft cloth dampened with glass

cleaner. Do not use any abrasive cleaners.

Do not use thinner, benzene or other strong chemical cleaners.

Warning!

Any intervention contrary to regulations, in particular, any modification of high voltage or a replacement of the picture tube may lead to an increased concentration of

x-rays. Any television modified in this way no longer complies with license and must not be operated.

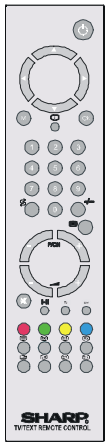
Instructions for waste disposal:

Packaging and packaging aids are recyclable and should principally be recycled. Packaging materials, such as foil bag, must be kept away from children.Batteries, including tho se which are heavy metal-free, should not be disposed of with household waste. Please dispose of used batteries in an environmentally sound manner.

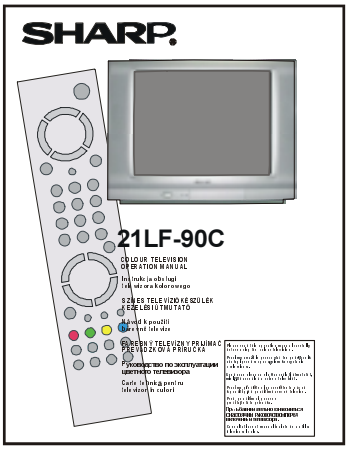
Find out about the legal regulations which apply in your area.

CAUTION: For environmental and safety reasons, it is recommended that this television set is not left in stand-by mode whilst not in use. Switch it off using the main switch. During periods of absence from home it is also wise to disconnect the set by unplugging the mains plug.

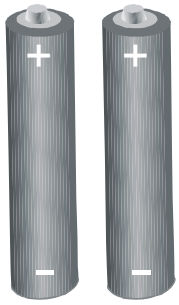
Supplied Accessories



Remote control

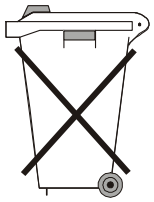


Operation Manual



Type-(R03 AAA) Dry Batteries

Respect the environment and put used batteries in a container that is especially designed for this purpose.



Cleaning The Screen

Your TV is fitted with a „True Flat" picture tube. The surface of the screen is covered with a foil. Under no circumstances may this be damaged.

To clean

Clean the laminated screen with a soft cotton cloth. Only non-alkaline, thinned soapsuds on a basis of water or alkohol be used to moisten the cloth. Rub the surface gently with the cloth until the surface is completely dry.

Under no circumstances...

may the screen be wiped with conventional glass cleaning fluid.

may the screen be brought into contact with abrasive materials.

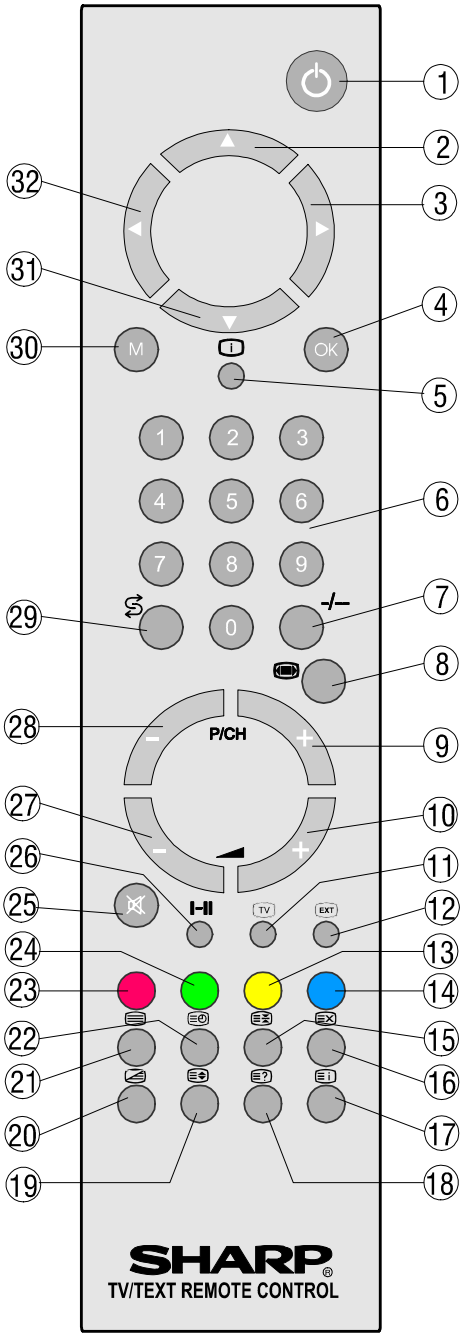
may soiling be renoved by polishing or scouring.

To clean off sticky substances, the cloth can be moistened with acetone.

Under no circumstances clean with this acetone cloth the TV-Cabinet.

Remote Control Buttons

① = Stand By
② △ = Cursor Up
③ ▷ = Cursor Right
④ OK = OK
⑤ = Info (Program Menu)
⑥ **0 - 9** = Direct Program
⑦ **-/--** = Double Digit
⑧ = Wide mode button
⑨ **P/CH+** = Program +
⑩ **+** = Volume +
⑪ = TV / Quit Menu
⑫ = EXT button (**SCART, F- AV, RGB**)
⑬ **Yellow** = Feature Menu
⑭ **Blue** = Installation Menu
⑮ = Hold
⑯ = Update
⑰ = Index Page
⑱ = Reveal
⑲ = Expand
⑳ = Mix
㉑ = Teletext
㉒ = Time
㉓ **Red** = Sound Menu
㉔ **Green** = Picture Menu
㉕ = Mute
㉖ **I-II** = Mono/Stereo - Dual I-II
㉗ **-** = - Volume
㉘ **- P/CH** = -Program
㉙ = Flash back button
㉚ **M** = Menu
㉛ ▽ = Cursor Down
㉜ ◁ = Cursor Left



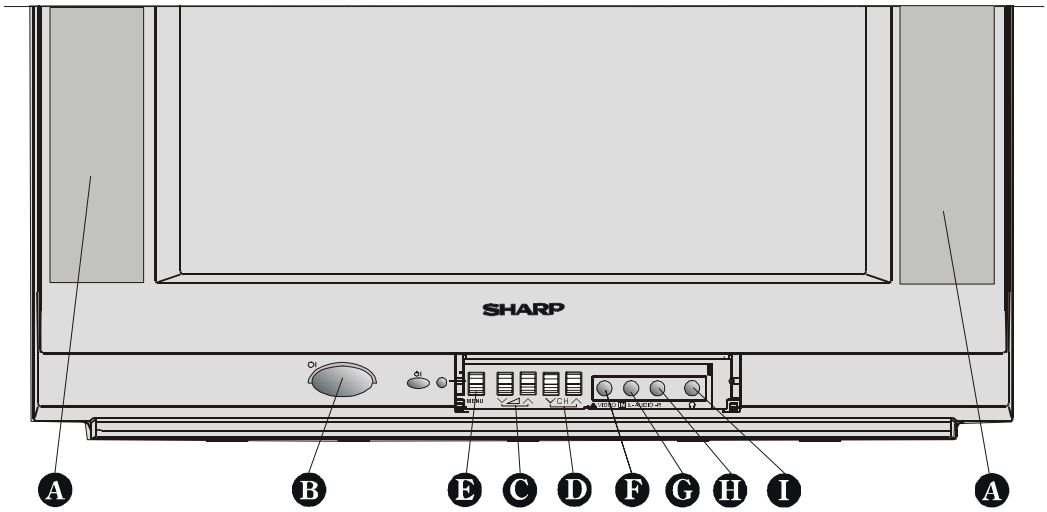
CAUTION

RISK OF ELECTRIC SHOCK

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock of persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

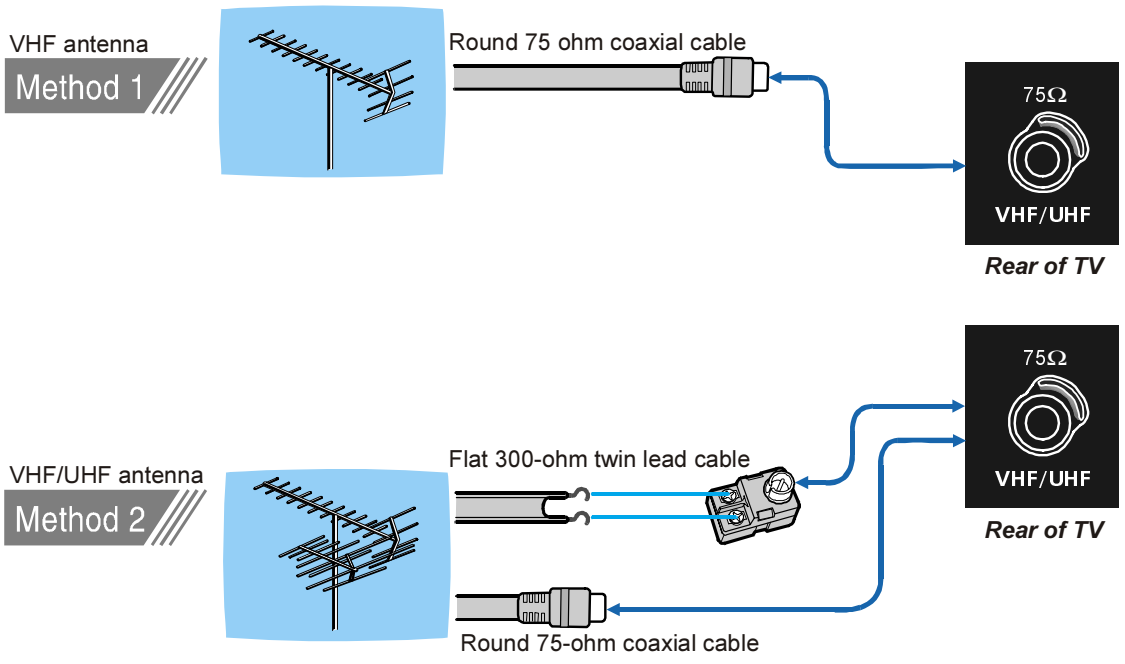
Control Panel Buttons



Ⓐ Speakers (left + right)
Ⓑ ⏻ = Power On / Off
Ⓒ ∨ 🔊 ∧ = Volume -/+
Ⓓ ∨ **CH** ∧ = Program -/+
Ⓔ **MENU** = Menu
Ⓕ **VIDEO** = VCR
Ⓖ **AUDIO L** = Audio left
Ⓗ **AUDIO R** = Audio right
Ⓘ 🎧 = Headphone 3,6 mm Ø

Antenna Connections

Outdoor Antenna Connections



Preparation

Place TV on a solid surface.

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.

"Use this apparatus in tropical and moderate climates."

Features

- Remote Control Colour Television.
- 100 UHF / VHF / Cable channel presets.
- Cable Channel Compatible.
- Menu Driven functions.
- One Euro connector Socket.
- German+ Nicam Stereo
- Front Audio /Video Input Terminal.
- 1 Page Simple Teletext .
- It is possible to connect headphone.
- Direct Channel access.
- APS (Automatic Programming system) Tuning.
- Program custom name feature.
- Automatic search tuning.
- Sleep Timer.
- Child lock.
- Audio mute on no video signals.
- Auto switch off after 5 minutes of no signal.
- WSS (wide screen signal decoding).
- NTSC playback.

Before Switching on your TV

Power connection

Important: The TV set is designed to operate on **220-240V AC, 50 Hz.**

- After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Aerial Connections

- Connect the aerial plug to the aerial input socket located at the back of the TV.

How to connect external equipment

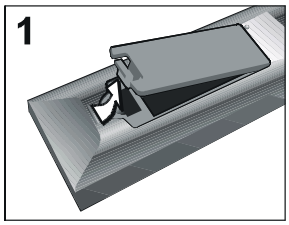
See "**Connecting external equipment**" on **page 17**.

- See the instruction manuals provided with the external devices too.

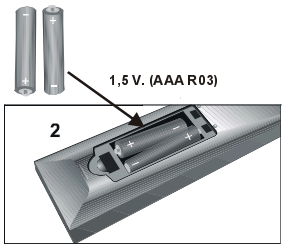
Remote Control Battery Installation

Before using the TV set for the first time, install the supplied dry batteries in the remote control.

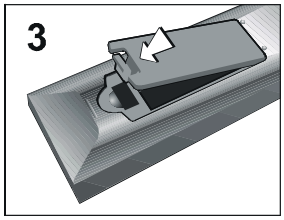
1. With your thumb nail, pull up the slit as indicated by the arrow to remove the battery cover.



2. Insert two batteries 1.5 V (**R03 AAA** size). Be sure to match the battery **+/-** terminals with the **+/-** marks inside the compartment.



3. Replace the battery cover.



Notes:

- Remove batteries if weak or if the unit is not in use for long periods.
- Do not mix old and new batteries.
- Incorrect installation of the batteries may damage the remote control.

Switching the TV ON/OFF

You can operate your TV both using the remote control handset and onset buttons.

To switch the TV on

Your TV will switch on in two steps:

1- Press the power button located on the front of the TV. Then the TV switches itself to standby mode and the **RED LED** located below the TV turns on.

2- To switch on the TV from stand-by mode either:

Press a digit button on the remote control so that a programme number is selected,

or,

Press Power button and "**∨ CH**" or "**CH∧**" buttons on the TV or "**-P/CH**" or "**P/CH+**" buttons on the remote control respectively, so the TV will switch on and the **RED** Led will turn **GREEN**.

To switch the TV off

- Press the stand-by button on the remote control, so the TV will switch to stand-by mode and the **GREEN LED** will become **RED**,

or,

Press the power button located on the front of the TV.

Initial Settings

The message "**PLEASE CHECK ANTENNA CABLE AUTO. PROGRAMMING SYSTEM**" will be displayed when you turn on your TV for the first time.

Note: If you connect Video Recorder to your TV via antenna input (ANT socket); to tune the VCR channel automatically you must set the VCR in play mode before you start APS.

To cancel APS before starting, press "TV" button.

1- Select **LANGUAGE** with "△" or "▽" button, then press the "◁" or "▷" button to select a menu language.

2- Select **COUNTRY** with "△" or "▽" button, then press the "◁" or "▷" button to select the correct country.

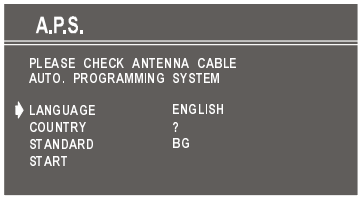
? : OTHER	NL : NETHERLANDS
D : GERMANY	P : PORTUGAL
A : AUSTRIA	E : SPAIN
CH : SWITZERLAND	TR : TURKEY
I : ITALY	EIR : IRELAND
F : FRANCE	L : LUXEMBOURG
B : BELGIUM	CZ : CZECH REPUBLIC
DK : DENMARK	PL : POLAND
S : SWEDEN	H : HUNGARY
N : NORWAY	BG : BULGARIA
SF : FINLAND	GR : GREECE
UK : UNITED KINGDOM	HRV : CROATIA/HRVATSKA

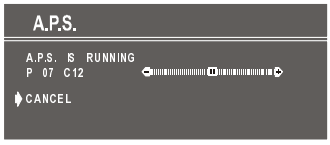
3 - Press the "△" or "▽" buttons to select "**STANDARD**". This, will effect the sort process in APS.

4 - Select **START** with "△" or "▽" button, then press the "▷" button to start **A.P.S.**

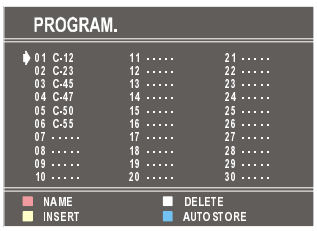
A.P.S., (Automatic Programming System) automatically programmes the received channels in your TV's programme numbers. During **A.P.S.**, "**A.P.S. IS RUNNING**" will be displayed. After **A.P.S.** is finalized, the "**PROGRAM.**" menu appears.

To cancel APS during running press "◁" or "▷" button.





After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.



If you do not accept the locations and / or the programme names of programmes, you can change them in "**PROGRAM. (Programming menu**" on **page 12.)**

Operating with the onset buttons

Volume setting and programme selection can be made using the buttons on the front panel.

Volume Setting

• Press "∨◿" button to decrease volume or "◿∧" button to increase volume, so a volume level scale (slider) will be displayed at the middle of the bottom on the screen.

Programme Selecting

• Press "**CH∧**" button to select the next programme or "**∨CH**" button to select the previous programme.

Entering Main Menu

• Press "**MENU**" button to enter Main menu. In the Main menu select sub-menu using "**∨CH**" or "**CH∧**" button and enter the sub-menu using "∨◿" or "◿∧" button. To learn the usage of the menus, refer to the Menu System section.

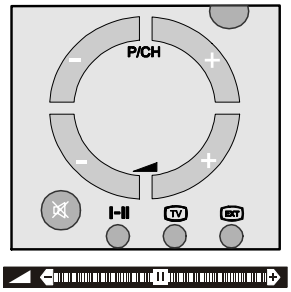
Operating with Remote Control

The remote control handset of your TV is designed to control all the functions of the model you selected. The functions will be described in accordance with the menu system of your TV.

Functions which you can use out of menu system are described below.

Volume Setting

Press "◢ **+**" button to increase volume. Press "**-**◢ " button to decrease volume.



Programme Selecting (Previous or next programme):

• Press "**-P/CH**" button to select the previous programme.

• Press "**P/CH+**" button to select the next programme.

Programme Selecting (direct access):

Press digit buttons on the remote control handset to select programmes between 0 and 9. TV will switch to the selected programme.

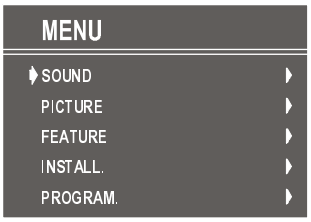
• For a two digit program number press " **-/--**" button. Press the first digit and then second digit of the programme channel you want to watch.

Menu System

Your TV has been designed with a menu system. Display **"MENU"** (main menu) and enter one of five menus **(SOUND, PICTURE, FEATURE, INSTALL.** and **PROGRAM.)**.

Press the "**M**" button. The Main menu will be displayed at the middle on the screen.

All the selected items in this menu system is indicated with **CYAN** characters and with an arrow on the leftside of items.



To select a sub-menu use "△" or "▽" button, and press "◁" or "▷" button. Each option can also be selected with the coloured button and "ⓘ" button on the remote control.

• To exit a menu, press "TV" button.

• To go to the previous menu, press "**M**" button.

MAIN MENU

The menu system is described below.

The short way in order to enter the menus, press :

"**M**" **Button, Main Menu.**

Red Button, Sound Menu.

Green Button, Picture Menu.

Yellow Button, Feature Menu.

Blue Button, Install Menu.

"ⓘ" **Button, Program Menu.**

Menu button has two functions; first is opening or closing the "MAIN MENU", and the second is closing the sub-menu and then opening its parent menu.

Sound Menu

To change sound settings

• Enter the Sound Menu directly, pressing the Red button or,

• As you enter the main menu, sound will be the first selected option. In the main menu, select **SOUND** using "△" or "▽" button, then enter the sound menu pressing "◁" or "▷" button.

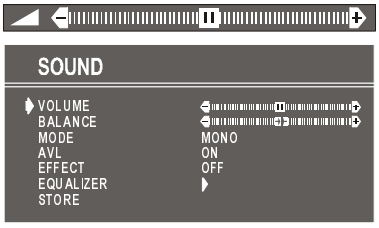
Setting Volume:

As you enter the sound menu, Volume will be the first selected option.

• Press "▷" button to increase volume.

• Press "◁" button to decrease volume.

Or you can directly change the volume settings using "◢ **+**" (to increase) or "**-**◢ " (to decrease) button.



Setting Balance

It allows adjusting the distribution between the left and right speakers.

• Using "△" or "▽" button select Balance.

• Press "▷" button to change balance rightward.

• Press "◁" button to change balance leftward.

When balance control is in mid position, the cursor is displayed with the two reciprocal arrows.

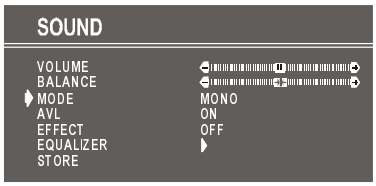
Selecting Mode

• Using "△" or "▽" button select Mode.

• Press "◁" or "▷" button to change Mode.

You can choose **MONO**, **STEREO** or **DUAL (I-II)** mode, only if the selected channel supports that mode.

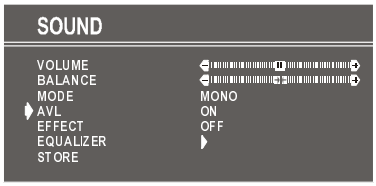
You can also change sound mode directly pressing "**I-II**" button on your remote control.



In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option.

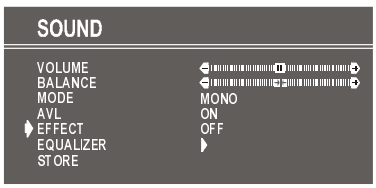
Setting AVL

Automatic Volume Limiting (AVL) function normalises sound to obtain fixed output level between programs, having different sound levels. Pressing "◁" or "▷" button will turn on and off this feature.



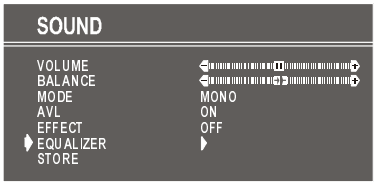
Setting Effect

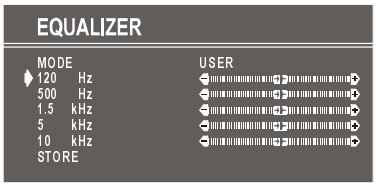
You can use this feature to switch the sound effect on and off. Pressing "◁" or "▷" button will turn on and off this feature. If the current sound system is **MONO** and the sound effect is set **ON**, then the sound will be heard as if it is **STEREO**. If the current sound system is **STEREO**, switching this effect on will make the sound deeper. Switching it off will make no change in **MONO** and **STEREO**.



Equalizer

To enter Equalizer sub-menu, select Equalizer using "△" or "▽" button, then enter Equalizer menu pressing "◁" or "▷" button.





In MODE item there are five predefined and one user defined options. These are USER, CLASSIC, JAZZ, ROCK, POP and FLAT. The predefined options can not be changed by the user. The USER option may be adjusted by the user.

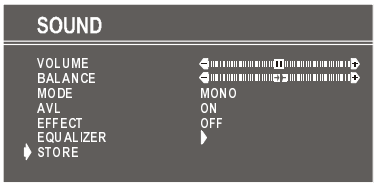
The 5 items below the MODE are available to adjust the-sound settings in 5 frequency values: 120 Hz, 500 Hz, 1.5 kHz, 5 kHz and 10 kHz. To change the values of 5 frequency options, select one of the options by "△" or "▽" button, and then press "▷" to increase the value, or "◁" to decrease the value. In mid position, cursor is displayed with the two reciprocal arrows.

To store the Equalizer settings, press "◁" or "▷" button on "**STORE**" option.

During the store process all the items are stored, moreover, the USER mode information would not be lost. In other words, when the user mode is selected again, after storing the MODE with one of the predefined options, the user defined frequency values would be set.

To Store the Settings

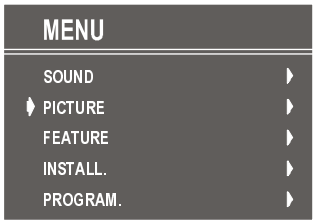
• Press "◁" or "▷" button on "**STORE**" option to store Sound menu settings.



Picture Menu

• To enter the Picture menu directly, press the "**GREEN**" button, or

• Press "**M**" button, now you are in Main menu. In the Main menu, select "**PICTURE**" using "△" or "▽" button, then enter the Picture menu pressing "◁" or "▷" button.



Setting Brightness

• As you enter the picture menu, Brightness will be the first selected option.

• Press "▷" button to increase brightness.

• Press "◁" button to decrease brightness.

Setting Contrast

• Using "△" or "▽" button select Contrast.

• Press "▷" button to increase contrast level.

• Press "◁" button to decrease contrast level.

Setting Colour

• Using "△" or "▽" button select Colour.

• Press "▷" button to increase colour level.

• Press "◁" button to decrease colour level.

Setting Sharpness

• Using "△" or "▽" button select Sharpness.

• Press "▷" button to increase sharpness level.

• Press "◁" button to decrease sharpness level.

Setting Hue

(During Playback NTSC system, this will appear in AV mode only when NTSC video source is applied. Otherwise, HUE option is invisible in Picture menu.):

• Using "△" or "▽" button select Hue.

• Press "▷" button to increase hue level.

• Press "◁" button to decrease hue level.

Center value is indicated with the two reciprocal arrows.

Mode

This item is used to change the picture size.

By pressing "◁" or "▷" button you may choose one of three options. These are, "4:3", "16:9" and "AUTO".

- **4:3** This option forces the picture ratio to 4:3 mode.
- **16:9** This option forces the picture ratio to 16:9 mode.
- **AUTO** Your TV changes the picture mode automatically, according to the transmission of the selected channel. For example, your TV is 4:3 mode, but the transmission of that channel is in 16:9 mode. If you select the AUTO mode, the TV is switched to 16:9 mode automatically. If the TV is in 4:3 mode and the picture ratio of the channel is also 4:3, there will be no affect selecting the picture mode to AUTO mode.

WSS feature is only used in TV and FAV modes. For the Picture Mode selection in AV1 the pin 8 (of Scart) value is used. In RGB modes the Picture Mode can be 4:3 or 16:9 (Auto mode is not available.).

Note:

In the Picture menu if you press Flashback (⟲) button the adjustments switch themselves to the factory settings.

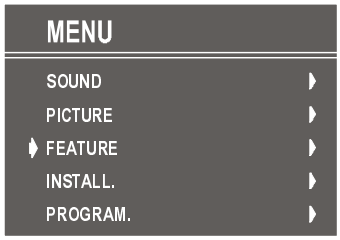
To Store the Settings

- Press "◁" or "▷" button on **STORE** option to store Picture menu settings.

The stored picture mode setting will be valid only in current program. However, the other stored values in Picture Menu will be valid for all the programmes.

Feature Menu

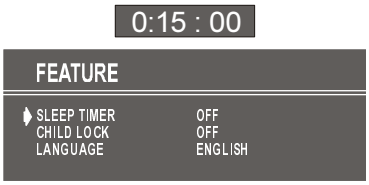
- To enter the Feature menu directly, press the "**YELLOW**" button, or
- Press "**M**" button, now you are in Main menu. In the Main menu, select **FEATURE** using "△" or "▽" button. Then enter the Feature menu pressing "◁" or "▷" button.



Sleep Timer

As you enter the Feature menu, **SLEEP TIMER** will be the first selected option. Use "◁" or "▷" button to change the Sleep Timer values between **OFF, 0:15:00, 0:30:00, 0:45:00, 1:00:00, 1:15:00, 1:30:00, 1:45:00** and **2:00:00**.

It is displayed on the upper right of the screen. If sleep timer is activated it is displayed with the TV status and erased with it after 3 seconds.



If there is left only one minute of the down counting of the timer, it is displayed automatically on the upper left of the screen, and stayed there until finishing. Then TV goes automatically to stand-by.

Child Lock

You can use this feature to prevent children turning on TV or changing programs or adjustments etc. without remote control.

The **CHILD LOCK** feature can be set by "◁" or "▷" button to either **ON** or **OFF**. When **OFF** is selected, there will be no difference in the operation of your TV. When **ON** is selected, the TV can only be controlled by the remote control handset. In this case, the front panel buttons (except the Power On/ Off button) will not work.

Selecting Menu Language

Menu language can be chosen by pressing "◁" or "▷" button on **LANGUAGE** item.

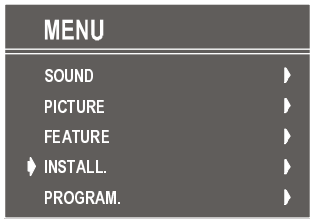
To Store Settings

In Feature menu all settings are stored automatically.

Install. Menu

- To enter the Install. menu directly, press the **BLUE** button, or

• Press “**M**” button, now you are in Main menu. In the Main menu, select “**INSTALL.**” using “△” or “▽” button. Then enter the Install menu pressing “◁” or “▷” button.



Selecting Programme

To select programme number, you can use “◁” or “▷” button, Digit Buttons or The Double Digit button with digit buttons.

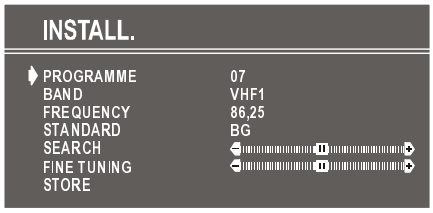
Selecting Band

BAND can be chosen as VHF1, VHF3 or UHF by “◁” or “▷” button.

Selecting Frequency

The frequency value is,

• 044 - 890 MHz for band VHF1 - VHF3 - UHF.



FREQUENCY can be changed by “◁” or “▷” button, by the Digit buttons or by the Double Digit button with digit buttons.

The decimal value in frequency can not be changed by the digit buttons, it can be changed only by the “◁” or “▷” button. The value can be “00”, “25”, “50” and “75”. Also changing Fine Tuning changes the decimal part.

Selecting Standard

Using “◁” or “▷” button on **STANDARD**, you can change the standard to **B/G, D/K, L/L’**.

Selecting Search

To start the search process, press “▷” button for forward search or “◁” button for backward search. **SEARCH** item blinks during search process, since the process is stopped or signal is found. During search process the semi-transparent menu background becomes "**BLUE**". To stop the search process “◁” or “▷” button must be pressed again.

Selecting Fine Tuning

You can use the Fine Tuning process for fine adjustment (after coarse adjustment), if you are not happy about the image on the screen.

Use “◁” or “▷” button on **FINE TUNING** item, until getting the best image on the screen.

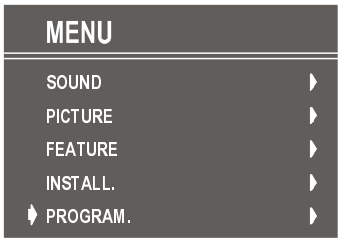
To Store Settings

Press “◁” or “▷” button on **STORE** option to store Install menu settings.

Program. Menu

• To enter Program. menu directly, press the "ⓘ" button, or

• Press “**M**” button, now you are in Main menu. In the Main menu, select “**PROGRAM.**” using “△” or “▽” button. Then enter the Programme menu pressing “◁” or “▷” button.



Moving cursor to four direction you can reach 30 programmes in the same page. By scrolling the pages up or down by pressing the navigation buttons you can select all the programmes in TV mode (except the AV mode).

In menus, “△” and “▽” buttons are working like "Direction Up" and "Direction Down".

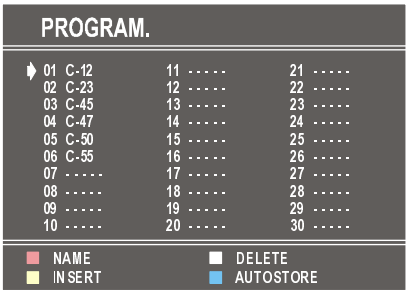
By cursor action, programme selection is done automatically. Selected programme is displayed with **“CYAN”** characters. In order to select programme is also possible by using digit or double-digit button. In this way programme selection gets also automatically and after selection the selected programme is displayed with cyan characters. The TV Status is changed by the programme selection too. When using double-digit button in order to select a programme, the Programme Number in TV Status OSD is displayed in "**P --**" form, and by pressing digit buttons they are displayed in it.

Programme Number is between 00 and 99. Programme Name has a name string with 5 characters. After autostore process the Programme Names are set to:

• "**PR01**" (programme number).

At the bottom of the menu there is a programme sort functions section. Each function is activated by color button (seen above). **NAME** allows changing the programme name. By **DELETE** you can delete programmes that you decided. **INSERT** section is for inserting programmes into another programme spaces. By selecting **AUTOSTORE** section, Autostore menu will be available.

To change the name of a decided programme, that programme is selected and pressed to the **RED** button (**NAME**). The first letter begins to blink on the selected name. To change that letter “△” or “▽” button can be used, and to select the other letters, “◁” or “▷” button can be used. If the cursor is at the last letter of the Programme Name, pressing “▷” button moves the cursor at the beginning. On the contrary, if the cursor is at the beginning of the Programme Name, pressing “◁” button moves the cursor at the end.



After changing the name by pressing the **RED** button (**STORE**) it is stored. After activating the name process the "**INSERT**", "**DELETE**" and "**AUTOSTORE**" processes will be inactive and "**CANCEL**" option will be valid. This option cancels the name process, if the new name do not want to be stored.

When it is pressed to **GREEN** button (**INSERT**), "**NAME**", "**AUTOSTORE**" and "**DELETE**" functions are erased, the selected programme (A) is displayed with green characters. From now on, the automatic selection is canceled. Cursors moves are indicated with "**CYAN**" characters. With navigation buttons, the decided program space (B) can be selected and by pressing the green button again inserting is occurred to that space (B).

It should be thought that Prog-00 is the lowest programme (like Prog-100). If any programme is inserted to Prog-00, the programmes under that programme space shift one up, and Prog-99 is adjusted to the first frequency value of VHF1 (44 MHz).

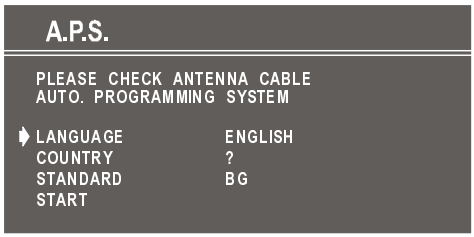
If Prog-00 is inserted to any programme space, all the programmes under that space shift one down and Prog-99 is erased, and Prog-00 is adjusted to the first frequency value of VHF1 (44 MHz).

"**CANCEL**" function cancels the activated "**INSERT**" process.

For "**DELETE**" process it is pressed to yellow button, ("**NAME**", "**INSERT**" and "**AUTOSTORE**" functions are inactive). Pressing yellow button again erases the selected programme from the programme list, and the programmes below shift one up. Prog-00 is adjusted to the first frequency value of VHF1 (44 MHz). Pressing blue button cancels the activated "**DELETE**" process.

To enter Autostore menu, press to the blue button. To learn the features of this function see "**A.P.S.**" below.

A.P.S., searches and stores all channels automatically on your TV, according to the transmission of programme systems in your area.



If your TV has more then one Standard option (It depends to your country) you may change it by using "◁" or "▷" button to BG, DK or L/L' on "**STANDARD**" item.

To cancel APS before starting, press "TV" or "**M**" button. First of all choose the "**COUNTRY**" and the "**STANDARD**". This, will effect the sort process in APS. To select "**START**" use "△" or "▽" button and press "◁" or "▷" button. To cancel APS during running press "◁" or "▷" button.

After APS is finalized, a programme list will apper on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you do not accept the locations and / or the programme names of programmes, you can change them in Programme menu.

Other Features

TV Status

Programme Number, **Programme Name** (or **AV**), (they are displayed on the upper left of the screen) and **Sleep Timer** (shows the time left on the upper right screen if enabled). In stereo options the sound indicator is displayed with them too. They are displayed after programme change during 3 seconds.

P 01 Programme Number

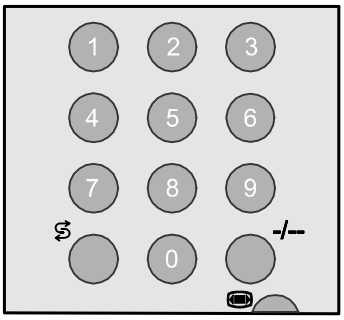
PR-01 Programme Name (5 characters)

These OSD's are displayed when a new programme is entered by digit button, by pressing "⇄" button, or by " **P/CH+**" or " **- P/CH** " button, or by "TV" button.

Flash back (⇄)

This button is used to return to the previous viewed preset.

By pressing the "⇄" button repeatedly it is possible to toggle between two presets.



Double-digit (- / - -)

This OSD is displayed when the "**- / - -**" button pressed in place of the programme number indicator.

P - -

After then, in order to enter a programme it must be pressed to two digit consecutively. When it is late to press any digit button this function will be ignored and the display will be erased. In the same way it must not be late to press any digit button after entering the first digit. The limit of the delay time is 3 seconds.

Sound Indicator

This is a stereo option. The alternatives of the indicator are Mono, Stereo, Dual I and Dual II. This indicator is displayed under the programme number indicator on the screen. "**I-II**" button is used to select Mono or Stereo, or Dual I or Dual II. In Mono broadcast or in forced-mono (for stereo broadcast).

MONO

In Stereo broadcast.

STEREO

If dual broadcast detected. Dual I is selected in default and also can be selected after Dual II by Remote Control.

If Dual II selected by Remote Control.

Picture Mode

The picture mode OSD is displayed below the sound indicator, by TV Status OSD's. According to the WSS data, inside of the OSD box "4:3" , "16:9" or "Auto" is written.

By pressing "" wide mode button. (if Teletext is not active) the picture mode can be switched into 4:3, 16:9 or Auto Mode.

Sleep Timer Last Minute Indicator

It is displayed on the upper right of the screen. If sleep timer is activated it is displayed with the TV status and erased with it after 3 seconds.

If there is left only one minute of the down counting of the timer, it is displayed automatically on the upper left of the screen, and stayed there until finishing. Then TV goes automatically to stand-by.

Sound Mute

To cut off the sound from the TV press "" button. To restore the sound press the "" button again or use the "+" or "-" buttons, in this case the volume will start from minimum setting.

No-Signal

No-Signal Timer Indicator

It is displayed in the middle of the screen when no valid signal detected. It shows the remained time for the switching to the Stand-By mode (it takes 5 minutes when any signal detected or no any Remote Control command is accessed). The indicator is displayed in 3 seconds when there is no valid signal.

After an Remote Control command (if No-Signal Timer is active) the timer stops and if no signal detected again the timer is initialized to 5 minutes and starts 3 seconds later again to count down.

It is not valid in AV mode.

Blue Background During No-Signal

In case, no valid signal is detected (inTV or AV mode) Blue Background is activated.During search process Blue Background is not active. But instead of it there is another feature given; the semi-transparent menu background is made blue.

Volume Bar

It is displayed in the lower middle of the screen. When a volume command is received (pressing "+" or "-" by Remote Control or Front panel) and no menu is active, it stays on the screen for 3 seconds, after the last volume command or until another command is received in between.

AV Modes

By pressing the "EXT" button you can switch your TV to AV modes (except being in Teletext). Pressing this button consecutively will switch the TV in one off the AV modes: SCART, F- AV (Front AV) or RGB.

SCART supports the RGB mode. But if there is some colour problem in SCART modes, please force the AV mode to RGB mode.

In order to quit the AV mode press the "TV" button.

Teletext

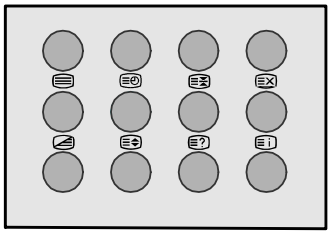
Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

On screen display is not available in text mode.

Contrast, brightness or colour control is not available, but volume control is available in text mode.

To operate Teletext

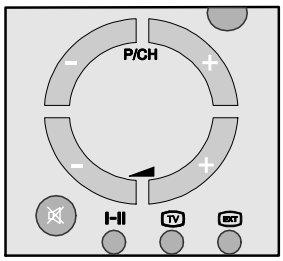
- Select a TV station on which Teletext is being transmitted.
- Press (TELETEXT) "" button. Usually the list of contents (index) is displayed on the screen.



To select a page of Teletext

- Press the appropriate digit buttons for the required Teletext page number.

The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.



- Press "**P/CH+**" button to move the Teletext screen forward one page at a time.
- Press "**-P/CH**" button to move the Teletext screen backward one page at a time.

To Select Index Page

- To select the page number of the index (generally page 100), press "" button.

To Select Teletext with a TV Programme

- Press "" button. The text is now superimposed over the programme on the screen.
- Press "" button again to return to the Teletext page.

Searching for a page while watching TV

- To search for a specific page whilst viewing the TV picture, whilst viewing teletext enter the desired Page number, then press the "" button will restore the TV picture. Once the desired page is found the Header of this page will appear on the screen. Press the "" button to view the full page.

To Select Double Height Text

- Press "" button for the top half of the information page to be displayed in double height text.
- Press "" button again for the bottom half of the information page to be displayed in double height text.
- Press "" button once more for the full page of normal height text.

To Reveal "concealed"Information

- Pressing "" button once will reveal answers on a quiz or games page.
- Pressing "" button again will conceal the revealed answers.

To Stop Automatic Page Change

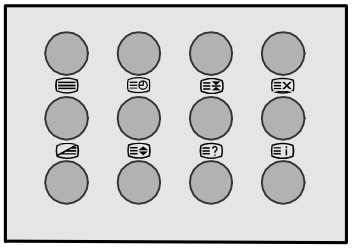
The teletext page you have selected may contain more information than can be displayed on one screen, in such cases the page will update periodically.

- Press "" button to stop the automatic page change.
- Press "" button again to allow the next page to be displayed.

To Select a Subcode Page

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- Select the required Teletext page.
- Press "" button.
- Select the required subcode page number by pressing four digit buttons (e.g. 0001).
- If the selected subcode page is not displayed in a short time, press "" button. TV programme will be displayed on the screen.
- Teletext page number will be displayed on the upper left corner of the screen when the selected page is found.
- Press "" button to display the selected Teletext page.



To exit Teletext

- Press "TV" button. The screen will switch to TV mode.

To Display the Time

- While watching a TV programme with Teletext transmission press "" button. The current time information, captured from Teletext will be displayed at the upper middle of the screen.
- If the programme being watched does not have Teletext transmission, no iformation will be displayed.

Connecting external equipment

There is a wide range of audio and video equipment that can be connected to your TV.

The following connection diagrams show you where the different equipment should be connected at the back or the front side of the TV.

Via the Euro connector

Your TV set has one Euro connector **(SCART)** socket. If you want to connect external equipment (e.g. video, decoder, etc.) which have Euro connectors, to your TV, use **SCART** terminal.

If an external device is connected via Euroconnector socket the TV will be switched to AV mode automatically.

RGB mode

If a piece of equipment outputs **RGB** signals use the **SCART socket** as this is **RGB** ready.

Via the ANT (aerial) socket

If you want to connect to your TV, peripherals like video recorders or decoders, but the device you want to connect does not have Euroconnector, you should connect it to the ANT input of your TV set.

If the VCR is connected via antenna input it is suggested to use the Programme 0.

Decoder

Cable TV offers you a wide choice of programs. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

• Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

• Connect the decoder to your TV with a eurocable (RCA Jack Cable) to **SCART socket**. When your decoder has a Euro connector / RCA Jack you can obtain better picture quality if you connect a eurocable (RCA Jack Cable) to **SCART socket.**

TV and Video Recoder (VCR)

• Connect the aerial cables.

Better picture quality can be obtained if you also connect a eurocable to **SCART socket**.

NTSC Playback

Connect NTSC VCR player through SCART socket at the back of the TV or through RCA Jack at the front of the TV.

Then, press "EXT" button to select SCART or F-AV.

Search for and store the test signal of the video recorder

• Unplug the aerial cable from the aerial socket "**ANT**" of your video recorder.

• Switch on your TV and put the video recorder on the test signal. (See the handbook for your video recorder.)

• Enter the Tuning menu via the Install menu.

• Search for the test signal of your video recorder in the same way as you searched for and stored the TV signals. See Tuning, Search and Store TV channels. Store the test signal under programme number 0.

• Replace the aerial cable in the aerial socket "**ANT**" of your video recorder once you have stored the test signal.

Camera and Camcorder

To connect to Front-AV input (F- AV) :

Connect your camera or camcorder at the front side of your TV.

• Connect your equipment to the TV via **VIDEO** (yellow), **AUDIO R** (red) and **AUDIO L** (white) inputs. You should connect the jacks to the input in the same colour.

Connect the decoder to the video recorder

Some video recorders have a special euroconnector for decoder.

• Connect a eurocable to the euroconnector of your decoder and to the special eurocon-nector of your video recorder. See also the handbook of your video recorder.

• To connect your video recorder to the TV, see TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket (HP) on the lower front / right side of your TV, to connect headphones.

Connecting external equipment

Before connecting anything

• Switch off all equipment.

• Read the manuals provided with the equipments.

To select an AV mode

Pressing "EXT" button on the remote control selects one of AV modes (**SCART, F-AV, RGB**)

• To return to the **TV** mode, repeatedly press "EXT" button.

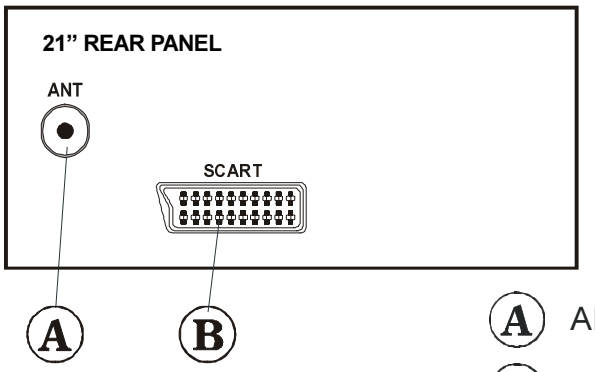
SCART terminal: 21-pin Euro connector.

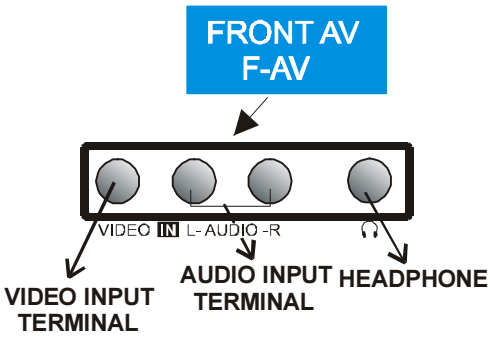
• Video input, Audio L/R inputs and RGB inputs are available.

• TV broadcast outputs (Video and Audio L/R) are available.

Front AV (F-AV) terminal :

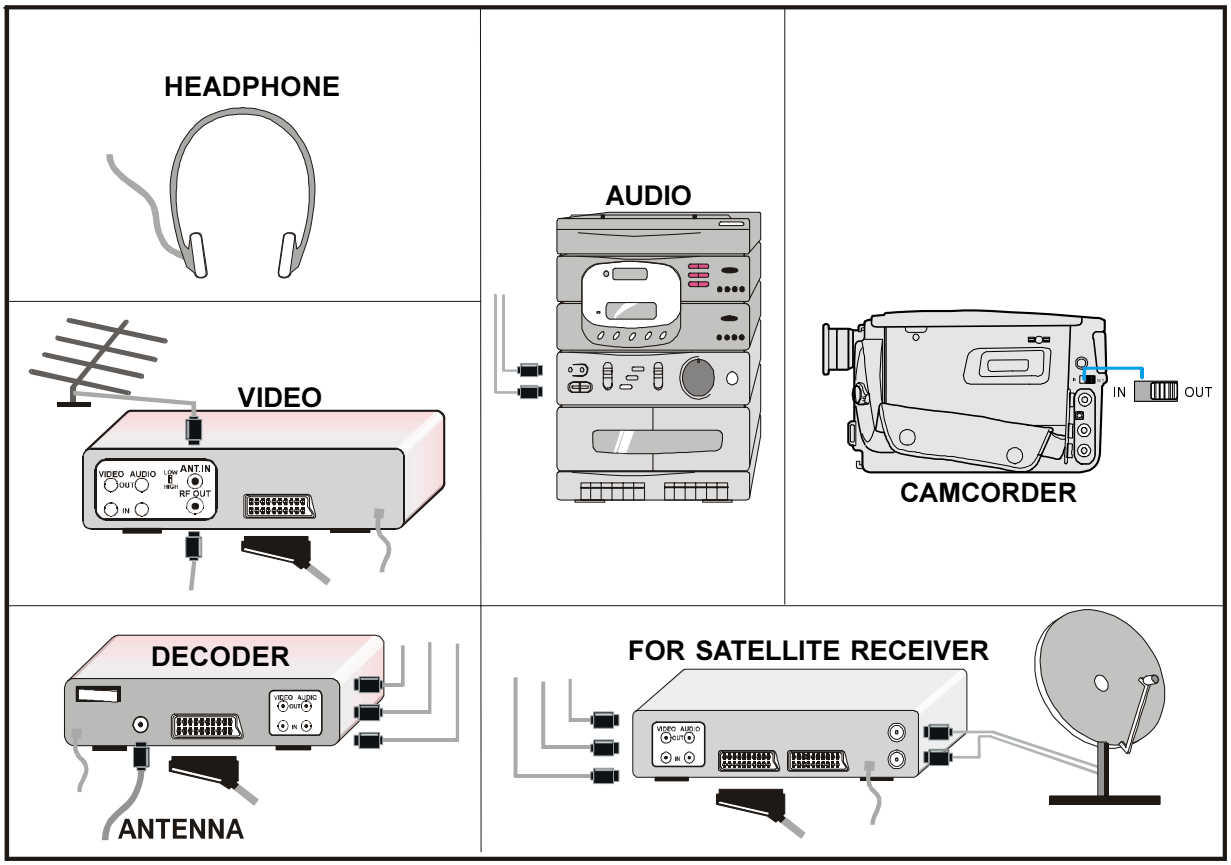
• Video input and Audio L/R inputs are available.





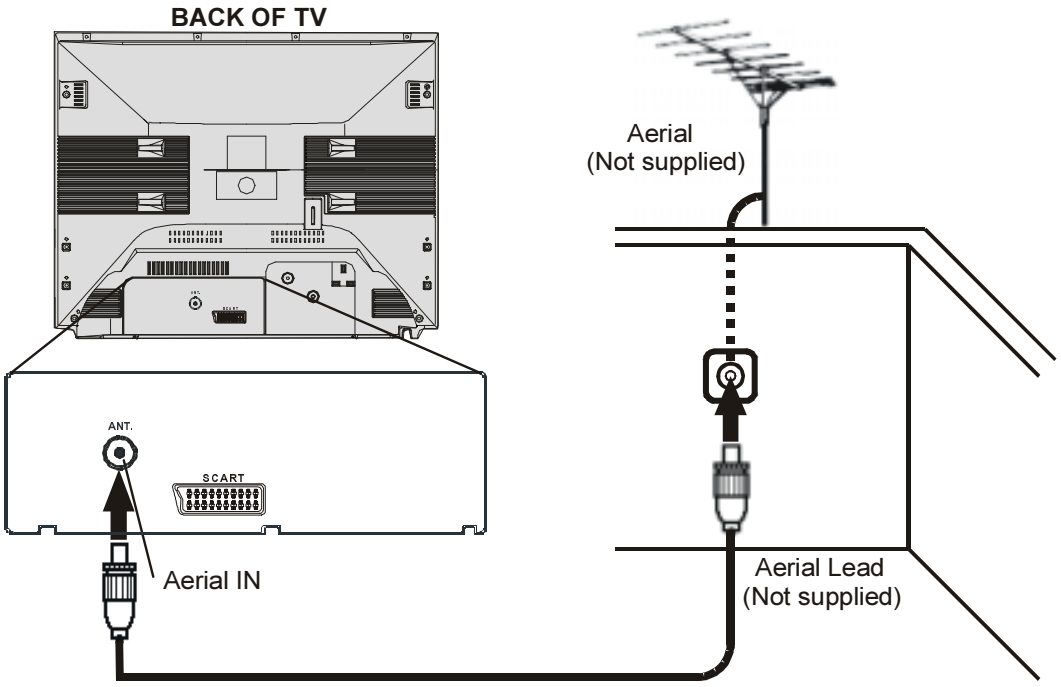
A ANTENNA

B Scart

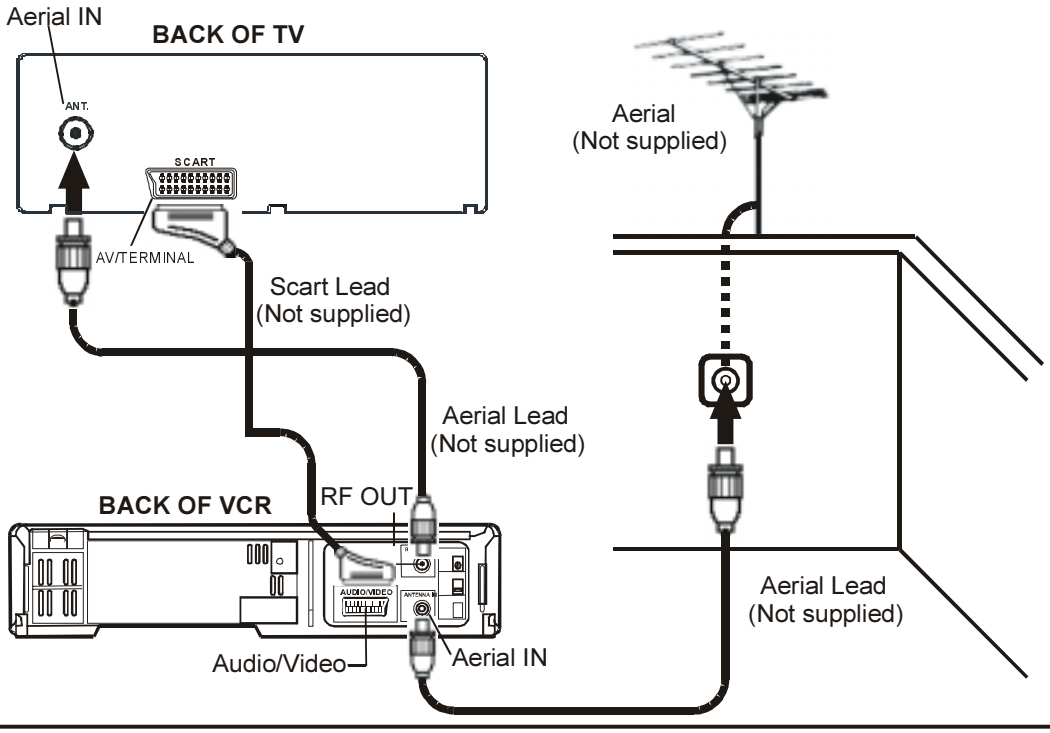


Typical Connections

Aerial connection - TV set only -



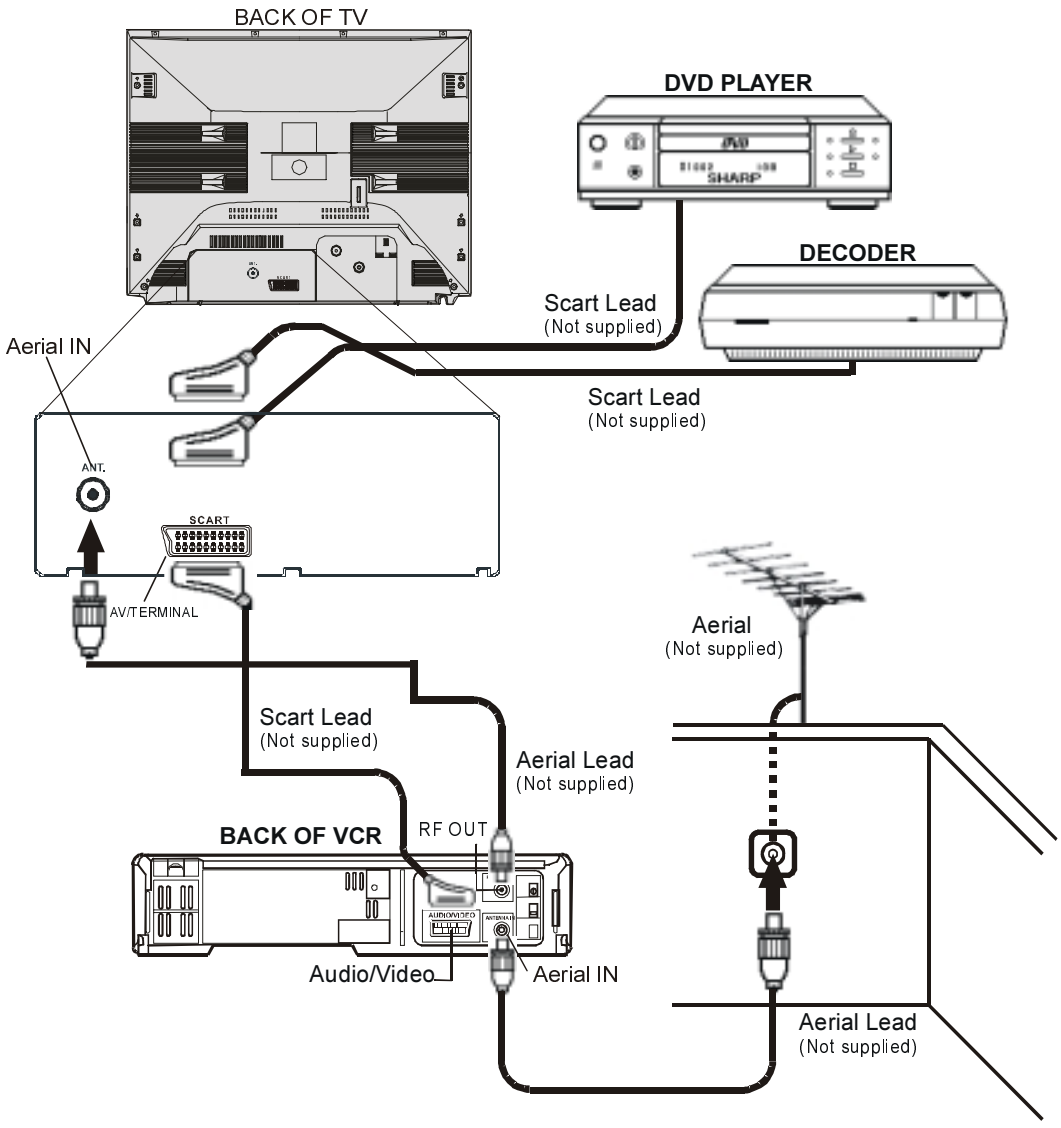
Aerial Connections - TV and VCR -



Note: For further details, please refer to operation manual of your VCR.

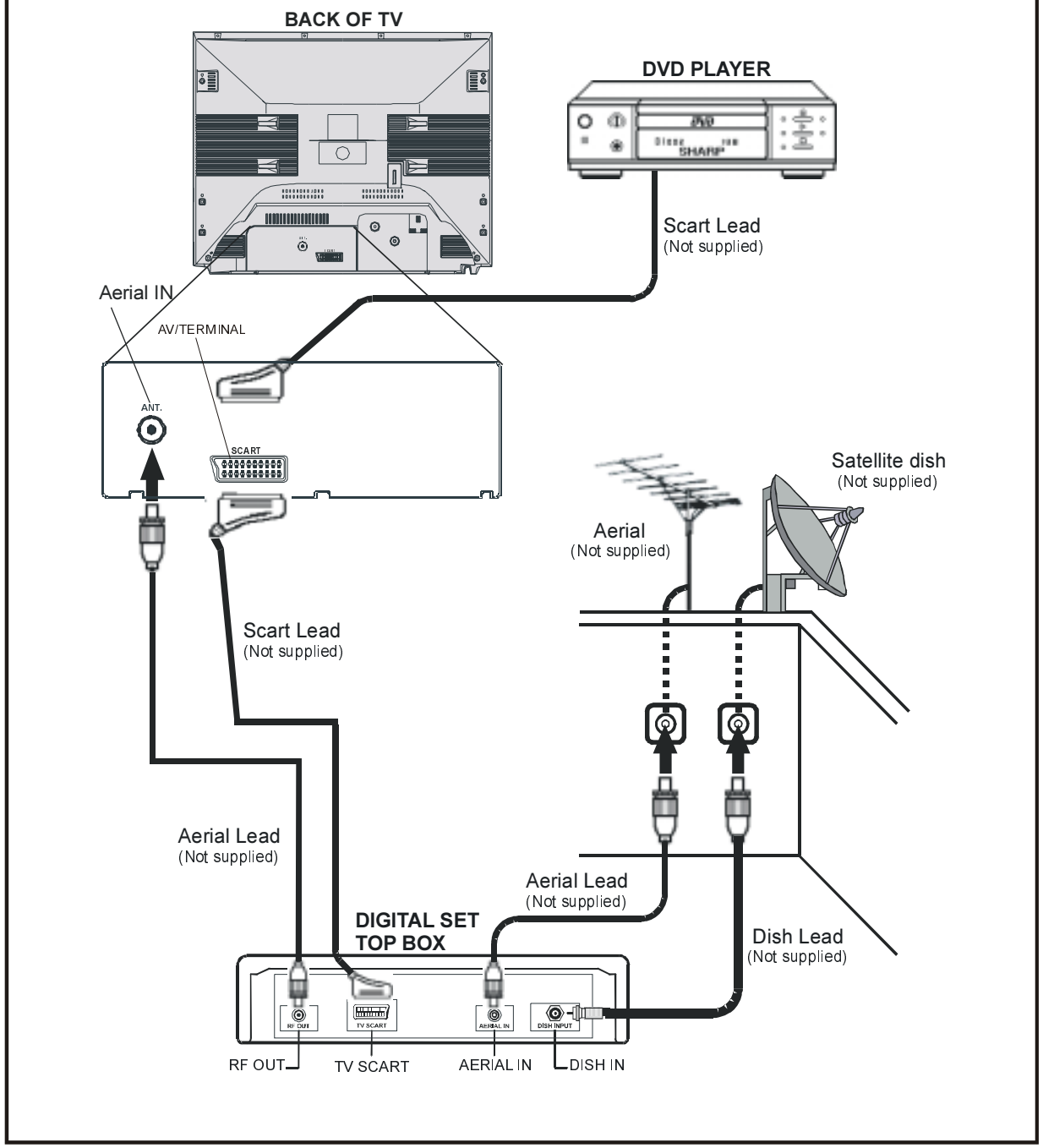
Typical Connections (Continued)

Connections - TV, DVD Player, DECODER and VCR (Videorecorder) -



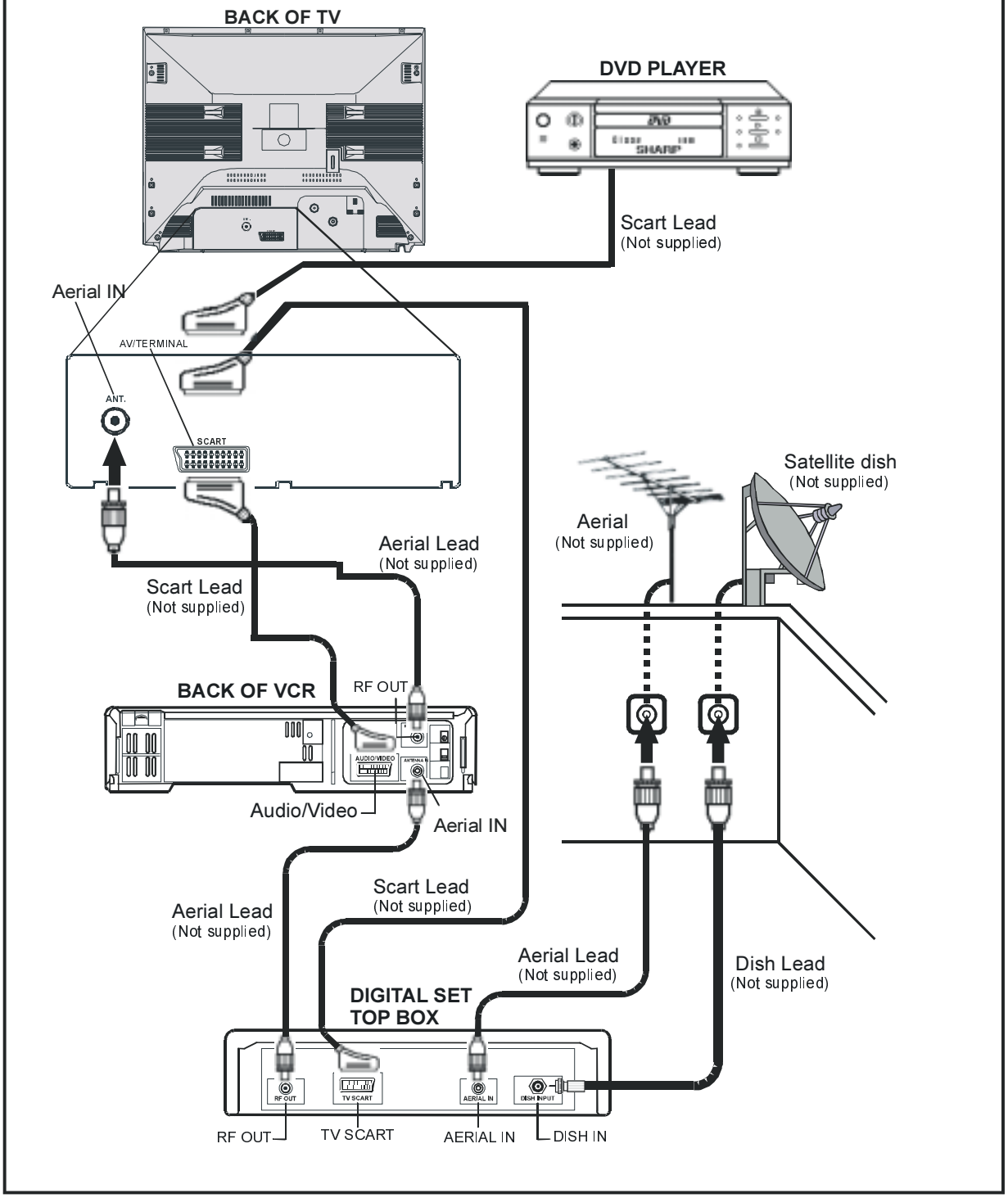
Note: For further details, please refer to operation manuals of your DVD Player, DECODER and VCR.

Connections - TV, DVD Player and Digital Set Top Box -



Note: For further details, please refer to operation manuals of your DVD Player and Digital Set Top Box.

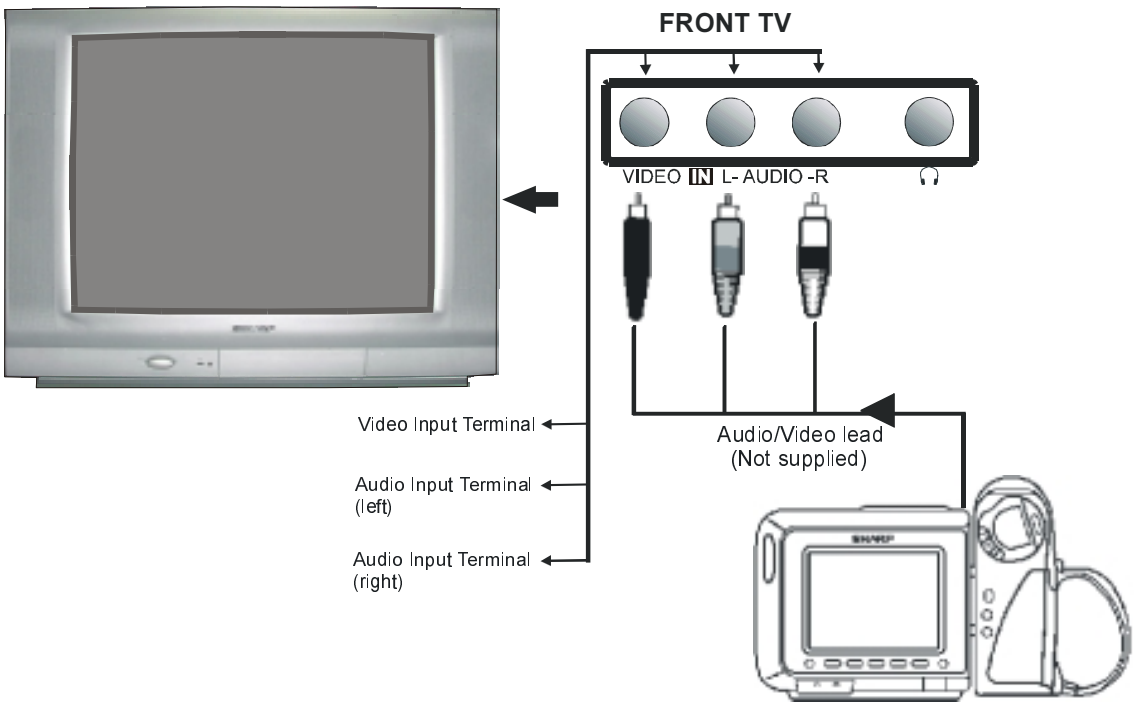
Connections - TV, DVD Player, VCR and Digital Set Top Box -



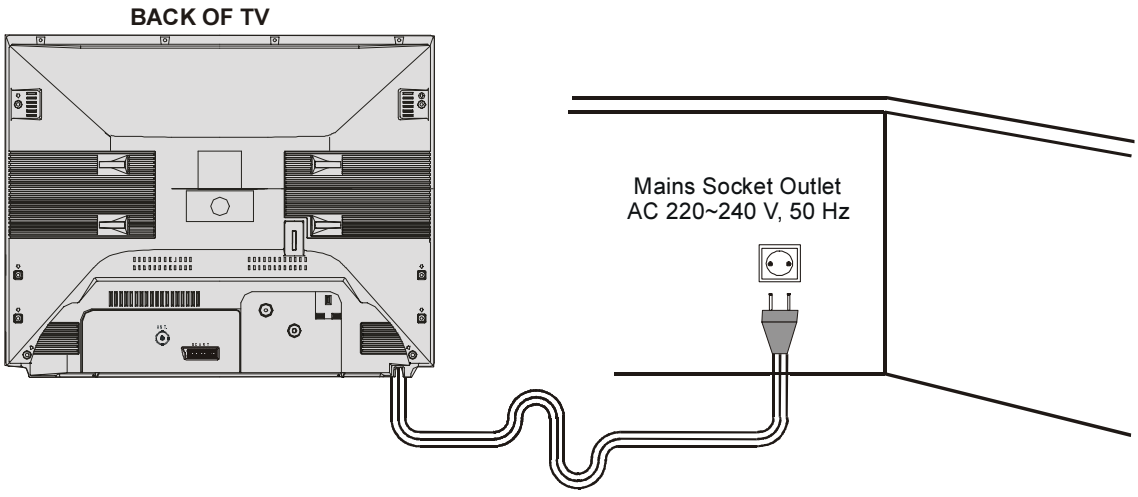
Note: For further details, please refer to operation manuals of your DVD Player, VCR and Digital Set Top Box.

Typical Connections (Continued)

Front connections -TV and Video camera-



Connection-TV power cable to a 220 ~ 240 V system -



Note: For further details, please refer to operation manual of your Video Camera.

21-pin Euro connector and 21-pin Audio/Video

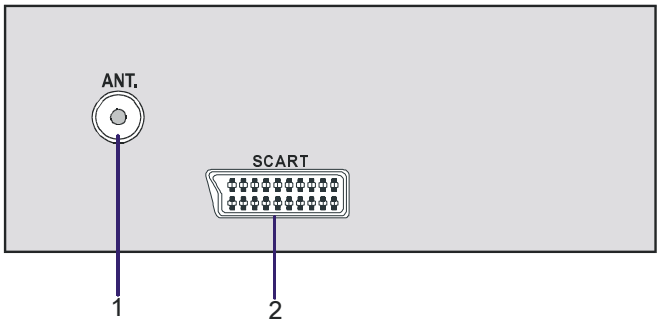
REAR TV

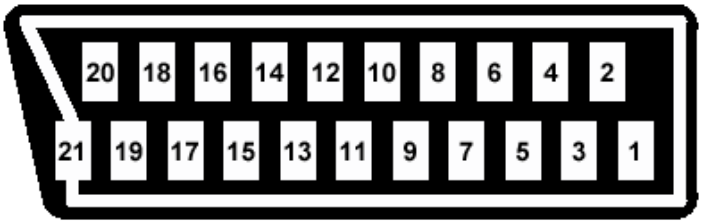
RF Input

1. Aerial terminal

21-pin In/Out

2. 21-pin Audio/Video (RGB) (SCART) With (PAL/SECAM/NTSC) Video Input





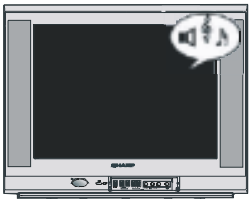
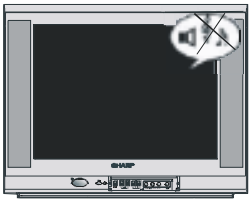
21-pin Euro connector (SCART)

1. Audio right output
2. Audio right input
3. Audio left output
4. Common earth for audio
5. Earth for blue
6. Audio left input
7. Blue input
8. Audio-video control
9. Earth for green
10. Not used
11. Green input
12. Not used
13. Earth for red
14. Not used
15. Red input
16. Red/Green/Blue control
17. Earth for video
18. Earth for Red/Green/Blue control
19. Video output
20. Video input (PAL/SECAM/NTSC)
21. Plug shield

Troubleshooting

The following conditions do not always denote trouble. Therefore, performs the checks described below before calling for service.

If the problem cannot be corrected by the use of this guide, pull the power plug out from the electrical outlet and call for service.

PROBLEMS	POSSIBLE CAUSES / REMEDIES
Remote control does not work	TV not plugged in Outlet power OFF Main power button of TV not ON Turn OFF using the Main Power button, then turn ON again after a minute Check batteries in the Remote Control
No colour / Picture weak	Try a new channel to check for possible station trouble Aerial not connected to terminal at the back of the TV set If outside aerial is used, check for broken wires Adjust COLOUR control Try fine tuning to correct
Poor reception on some channels	Try a new channel to check for possible station trouble Aerial not connected to terminal at the back of the TV set If outside aerial is used, check for broken wires Check for local interference
 Sound OK, poor picture	Try a new channel to check for possible station trouble Aerial not connected to terminal at the back of the TV set If outside aerial is used, check for broken wires Check for local interference Adjust COLOUR control Try fine tuning to correct Check if the Brightness or Contrast setting in the picture setting mode might be all the way to the minus side
Picture OK, poor sound	Try a new channel to check for possible station trouble Check for local interference Increase the volume / Check Audio levels
 No picture or sound	Try a new channel to check for possible station trouble TV not plugged in Outlet power OFF Main power button of TV not ON Aerial not connected to terminal at the back of the TV set If outside aerial is used, check for broken wires Turn OFF using the Main Power button, then turn ON again after a minute Check if the Brightness or Contrast setting in the picture setting mode might be all the way to the minus side Increase the volume / Check Audio levels

Specifications

TV BROADCASTING

PAL SECAM B/G D/K L/L'

RECEIVING CHANNELS

VHF (BAND I/III)
UHF (BAND U)
HYPERBAND
CABLE TV (S1-S20/ S21-S41)

NUMBER OF PRESET CHANNELS **100**

CHANNEL INDICATOR

On Screen Display

RF AERIAL INPUT

75 Ohm (unbalanced)

Power Consumption at (Stand-by)

< 3 Watts

OPERATING VOLTAGE

220-240V AC, 50 Hz.

AUDIO OUTPUT

Stereo

AUDIO OUTPUT POWER ($W_{RMS.}$) (%1 THD)

2 x 4

POWER CONSUMPTION (W)

66

PICTURE TUBE

21" (55 cm)

Safety
CE - MARK
EMC
CE - MARK

DIMENSIONS (mm)

DIMENSIONS (mm)			
D	L	H	Weight (kg)
490	595	475	23

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